

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of the Claims:

Claims 1-58 (Cancelled)

Claim 59 (Currently Amended): A microscope system comprising:
a microscope including an automatically adjustable subassembly having an adjustable element;
a digital camera configured to acquire image data of an image of a specimen; and
a computer system including:
a display and a storage unit configured to store the image data and to store, associated with the image data, setting data defining a setting of the automatically adjustable subassembly corresponding to the image data, and
a control unit configured to control functions of the microscope and to automatically adjust the adjustable subassembly to establish the setting defined by the setting data and corresponding to the image data.

Claim 60 (Previously Presented): The microscope system as recited in claim 59 wherein the storage unit is configured to store image data of a reference image and to store, associated with the image data of the reference image, data defining a setting of the automatically adjustable subassembly corresponding to the image data of the reference image.

Claim 61 (Previously Presented): The microscope system as recited in claim 59 wherein the automatically adjustable subassembly includes at least one of an objective nosepiece, a microscope stage, a condenser, a magnification changer, a filter changer, an adjustable diaphragm, a brightness controller or a lighting device, and a setting element of the digital camera.

Claim 62 (Previously Presented): The microscope system as recited in claim 61 wherein the objective nosepiece is configured to receive a plurality of objectives each in a

respective position and to rotate between the positions, and further comprising a motor associated with the objective nosepiece and configured to rotate the objective nosepiece between the positions.

Claim 63 (Previously Presented): The microscope system as recited in claim 61 further comprising a first, a second and a third motor associated with the microscope stage, the first motor being configured to move the microscope stage in an X-direction, the second motor being configured to move the microscope stage in Y-direction and the third motor being configured to move the microscope stage in a Z-direction.

Claim 64 (Previously Presented): The microscope system as recited in claim 61 further comprising a motor-driven actuation element configured to change over the condenser.

Claim 65 (Previously Presented): The microscope system as recited in claim 61 further comprising a motor-driven actuation element configured to change over the magnification changer.

Claim 66 (Previously Presented): The microscope system as recited in claim 61 wherein the filter changer includes a filter wheel including a motor configured to move individual filter elements into an optical axis.

Claim 67 (Previously Presented): The microscope system as recited in claim 61 further comprising a motor configured to adjust the adjustable diaphragm.

Claim 68 (Previously Presented): The microscope system as recited in claim 61 wherein the brightness controller includes an electronic circuit.

Claim 69 (Previously Presented): The microscope system as recited in claim 61 wherein the display is configured to depict user interface of the digital camera configured to specify a setting of the digital camera.

Claim 70 (Previously Presented): The microscope system as recited in claim 69 wherein the user interface of the digital camera includes a first area, a second area and a third area, settings for acquisition of the image can being specifiable in the first area, a

configuration for a type of the digital camera being settable in the second area, the image acquired by the digital camera being depictable in the third area.

Claim 71 (Previously Presented): The microscope system as recited in claim 59 wherein the display is configured to depict a user interface for handling the image data stored in the storage unit and for handling settings of the microscope corresponding to the image data.

Claim 72 (Previously Presented): The microscope system as recited in claim 71 wherein the user interface includes a plurality of windows.

Claim 73 (Previously Presented): The microscope system as recited in claim 72 wherein the plurality of windows includes a first window configured to enter and display a type of the microscope.

Claim 74 (Previously Presented): The microscope system as recited in claim 72 wherein the plurality of windows includes a second window configured to enter and display a freely definable description.

Claim 75 (Previously Presented): The microscope system as recited in claim 72 wherein the plurality of windows includes a third window configured to enter and display a setting of the microscope.

Claim 76 (Previously Presented): The microscope system as recited in claim 75 wherein the third window is configured to display at least one of a name assigned to the stored image data, a file name, a magnification or the objective used to acquire the image, a use of a magnification changer, a size of the diaphragm opening, a brightness, a type of condenser, an illuminated field diaphragm, a filter cube employed, an objective designation, a tube magnification, an X-position of a stage of the microscope, a Y-position of the stage, a Z-position of the stage, a contrasting method employed, a phototube employed, an article number of the phototube employed, and a position of an objective nosepiece of the microscope.

Claim 77 (Previously Presented): The microscope system as recited in claim 72 wherein the plurality of windows includes a fourth window configured to display a list of names assigned to individual images made up of acquired image data.

Claim 78 (Previously Presented): The microscope system as recited in claim 72 wherein the plurality of windows includes a fifth window configured to display, in a matrix as thumbnails, respective images corresponding to image data stored in the storage unit.

Claim 79 (Previously Presented): The microscope system as recited in claim 78 wherein the fifth window is configured to display on each of the thumbnails, respective data useable to at least one of set the microscope and designate the respective image data depicted on the respective thumbnail.

Claim 80 (Previously Presented): The microscope system as recited in claim 59 wherein the computer system is associated with an input unit including at least one of a mouse, a trackball, a keyboard, a touchscreen.

Claim 81 (Previously Presented): The microscope system as recited in claim 59 wherein the display is configured to depict a user interface useable to output a message indicating a status of the setting of the subassembly and based on the data defining the setting.

Claim 82 (Previously Presented): The microscope system as recited in claim 81 wherein the user interface is configured to depict subassemblies that go with a type of the microscope and that are to be adjusted, and wherein a first subassembly of the subassemblies that is automatically adjusted on the basis of the data defining the setting is associated with a second message indicating a change that has been made.

Claim 83 (Previously Presented): The microscope system as recited in claim 81 wherein the user interface is configured to depict subassemblies that go with a type of the microscope and that are to be adjusted, and wherein a first subassembly of the subassemblies that cannot be automatically adjusted on the basis of the data defining the setting is associated with a second message indicating that a change has not been made for the first subassembly.

Claim 84 (Previously Presented): The microscope system as recited in claim 83 wherein the first subassembly is configured to be adjusted manually by a user,

Claim 85 (Previously Presented): The microscope system as recited in claim 81 wherein the user interface is configured to depict subassemblies that go with a type of the microscope and that are to be adjusted, and wherein a first subassembly of the subassemblies that is not implemented in the microscope is indicatable on the display by a second message.

Claim 86 (Previously Presented): The microscope system as recited in claim 59 wherein the microscope includes a stage and specimen slide receivable by the stage, the specimen slide including a marking detectable by the microscope system and configured to serve as a reference point for an X-value and a Y-value of the stage.

Claim 87 (Previously Presented): The microscope system as recited in claim 86 wherein the marking is disposed on a non-transparent part of the specimen slide.

Claim 88 (Previously Presented): The microscope system as recited in claim 88 wherein microscope stage includes a slide holder, and wherein the specimen slide includes an interacting element configured to interact with a counterpart on the slide holder,

Claim 89 (Currently Amended): A method for operating a microscope system including a microscope having at least one automatically adjustable subassembly with at least one adjustable element, a digital camera connected to the microscope, and a computer system having at least one display and at least one storage unit, the method comprising:

acquiring, by the digital camera, image data of an image of a specimen;

storing the image data in the storage unit;

associating, with the image data stored in the storage unit, setting data defining a setting of the at least one subassembly of the microscope;

depicting the image on a user interface of the display;

selecting the image depicted on the user interface and the associated data defining the setting of the at least one automatically adjustable subassembly of the microscope; and

automatically adjusting establishing the setting of the at least one automatically adjustable subassembly using the at least one adjustable element so as to establish the setting defined by the setting data and associated with the image data.

Claim 90 (Previously Presented): The method as recited in claim 89 further comprising:

storing, in the storage unit, image data of at least one reference image; and associating, with the at least one reference image, data useable for a setting of the at least one automatically adjustable subassembly corresponding to the image data of the at least one reference image.

Claim 91 (Previously Presented): The method as recited in claim 89 wherein the at least one automatically adjustable subassembly includes at least one of an objective nosepiece, a microscope stage, a condenser, a magnification changer, a filter changer, an adjustable diaphragm, a brightness controller of a lighting device and a setting of the digital camera.

Claim 92 (Previously Presented): The method as recited in claim 89 wherein the display is configured to depict a user interface of the digital camera, the user interface including a first area, a second area and a third area, settings for acquisition of the image being specifiable in the first area, a configuration for a type of the digital camera being settable in the second area, the image acquired by the digital camera being depictable in the third area.